25. (Twice Amended) A device for investigating reactions between interactive chemical or biological species, said device comprising:

a substrate comprising a film of free electron metal consisting essentially of gold; and

a plasma layer comprising sulfur deposited directly on said substrate and defining a stable surface composition layer.

33. (Twice Amended) A process for producing a device for investigating reactions between interactive chemical and biological species, said process comprising the steps of (a) providing a pre-selected substrate, said substrate comprising a film of free electron metal consisting essentially of gold and (b) arranging a layer comprising sulfur directly on the gold film by plasma deposition and defining a stable surface composition layer.

REMARKS

Claims 25 and 28-48 are pending in this application. This amendment is supplemental to our remarks in the previously filed Response Accompanying Request for Continued Examination dated December 11, 2002.

Independent claims 25 and 33 have been amended to define further "a stable surface composition layer" resulting from a plasma layer comprising sulfur deposited directly on a gold surface of a substrate. Support for the amendment to claims 25 and 33 is found in Table 1, page 7 and Table 4, page 11 of the present specification. Entry of the amendments to claims 25 and 33 is respectfully requested.

As discussed on page 3 and 4 in the Remarks section of the previous Response, the resultant stable surface composition layer of the present invention is new and unexpected. The properties that exhibit a stable surface composition layer are quantified in the comparative